Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application.

1. (Currently amended) A titanium oxide-organic polymer composite material for artificial bone obtained by the steps comprising:

forming titania gel on the surface of a base material by titania solution treatment ~~to dip~~ by dipping into a solution of 0° C to 50° C temperature for from several seconds to 1 week said base material composed of a polymer compound selected from a group consisting of polyester and nylon, wherein said titania solution is obtained by adding a solution consisting of acidic alcohol and water into alcohol solution of titaniumtetraalkoxide ~~to said base material composed of a polymer compound selected from a group consisting of polyolefin, polyester and nylon~~, and

modifying to a titanium oxide membrane which forms apatite having similar Ca/P atom ratio to an apatite of mammalian~~'s~~ bone in supersaturated aqueous solution ~~to apatite~~ or from ~~a~~ mammalian body fluid ~~of mammalian~~ by dipping said base material on the surface of which titania gel is formed into hot water of 50° C to 95° C or solution of room temperature to 95° C to which acid is added.

2. (Previously presented) The titanium oxide-organic polymer composite material for artificial bone of claim 1, wherein titaniumtetraalkoxide is tetraisopropyltitanate, alcohol is ethanol and acid is inorganic acid.

3. (Currently amended) The titanium oxide-organic polymer composite material for artificial bone of claim 1, wherein ~~polyolefin is low-density polyethylene,~~ polyester is

polyethyleneterephthalate and nylon is 6-nylon.

4. (Currently amended) The titanium oxide-organic polymer composite material for artificial bone according to claim 1, wherein the ~~solution for~~ titania solution ~~treatment~~ is ~~prepared~~ obtained by ~~dipping~~ adding a solution composed of acidic alcohol and water to a solution of titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

5. (Currently amended) A composite material for artificial bone prepared by the steps comprising:

obtaining a titanium oxide-organic polymer composite material for artificial bone obtained by forming titania gel on the surface of ~~said~~ a base material by titania solution treatment characterizing dipping into a solution of 0° C to 10° C temperature for from several seconds to 1 week said base material composed of a polymer compound selected from a group consisting of polyester and nylon, wherein said titania solution is obtained by adding a solution consisting of acidic alcohol and water into alcohol solution of titaniumtetraalkoxide ~~to a base material composed of a polymer compound selected from a group consisting of polyolefin, polyester and nylon~~, and

modifying to a titanium oxide membrane which forms apatite having similar Ca/P atom ratio to an apatite of mammalian~~'s~~ bone in supersaturated aqueous solution ~~to apatite~~ or from ~~a~~ mammalian body fluid ~~of mammalian~~ by dipping said base material on the surface of which titania gel is formed into hot water of 50° C to 95° C or solution of room temperature to 95° C to which acid is added, then forming an apatite by dipping said composite into supersaturated aqueous solution to apatite.

6. (Previously presented) The composite material for artificial bone of claim 5, wherein titaniumtetraalkoxide is tetraisopropyltitanate, alcohol is ethanol and acid is inorganic acid.

7. (Currently amended) The composite material for artificial bone of claim 5, wherein titanium oxide-organic polymer for artificial bone is obtained by using ~~low-density polyethylene as polyolefin,~~ polyethyleneterephthalate as polyester and 6-nylon as nylon.

8. (Currently amended) The ~~titanium oxide-organic polymer~~ composite material for artificial bone according to claim 5, wherein the ~~solution for~~ titania solution ~~treatment~~ is ~~prepared~~ obtained by ~~dipping~~ adding a solution composed of acidic alcohol and water to a solution of titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

9. (Currently amended) The titanium oxide-organic polymer composite material for artificial bone of claim 2, wherein ~~polyolefin is low-density polyethylene,~~ polyester is polyethyleneterephthalate and nylon is 6-nylon.

10. (Currently amended) The titanium oxide-organic polymer composite material for artificial bone according to claim 2, wherein the ~~solution for~~ titania solution ~~treatment~~ is ~~prepared~~ obtained by ~~dipping~~ adding a solution composed of acidic alcohol and water to a solution of titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

11. (Currently amended) The titanium oxide-organic polymer composite material for artificial bone according to claim 3, wherein the ~~solution for~~ titania solution ~~treatment~~ is ~~prepared~~ obtained by ~~dipping~~ adding a solution composed of acidic alcohol and water to a solution of titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

12. (Currently amended) The titanium oxide-organic polymer composite material for artificial bone according to claim 9, wherein the ~~solution for~~ titania solution ~~treatment~~ is ~~prepared~~ obtained by ~~dipping~~ adding a solution composed of acidic alcohol and water to a solution of titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

13. (Currently amended) The composite material for artificial bone of claim 6, wherein titanium oxide-organic polymer for artificial bone is obtained by using ~~low-density polyethylene as polyolefin,~~ polyethyleneterephthalate as polyester and 6-nylon as nylon.

14. (Currently amended) The ~~titanium oxide-organic polymer~~ composite material for artificial bone according to claim 6, wherein the ~~solution for~~ titania solution ~~treatment~~ is ~~prepared~~ obtained by ~~dipping~~ adding a solution composed of acidic alcohol and water to a solution of titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

15. (Currently amended) The ~~titanium oxide-organic polymer~~ composite material for artificial bone according to claim 7, wherein the ~~solution for~~ titania solution ~~treatment~~ is ~~prepared~~ obtained by ~~dipping~~ adding a solution composed of acidic alcohol and water to a solution of titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

16. (Currently amended) The ~~titanium oxide-organic polymer~~ composite material for artificial bone according to claim 13, wherein the ~~solution for~~ titania solution ~~treatment~~ is ~~prepared~~ obtained by ~~dipping~~ adding a solution composed of acidic alcohol and water to a solution of titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.